1. A method of allocating an ATM connection over a link of an ATM network, the method comprising:

determining a first bandwidth for the ATM connection based on a number of calls for the ATM connection and an estimated bandwidth per call, wherein the estimated bandwidth per call

5    corresponds to a maximum bandwidth required for a call;

determining an overbooking factor for the link;

adjusting the first bandwidth for the ATM connection based on the overbooking factor to determine a second bandwidth for the ATM connection;

determining if the link has at least the second bandwidth available; and

10    allocating the ATM connection for the second bandwidth if the link has at least the second bandwidth available.

2. The method of claim 1, further comprising:

denying the ATM connection for the second bandwidth if the link does not have at least

15    the second bandwidth available.

3. The method of claim 1, wherein the estimated bandwidth per call comprises a maximum bandwidth for a call.

20    4. The method of claim 1, wherein the estimated bandwidth per call comprises the bandwidth for a fax call.

5. The method of claim 1, wherein the maximum bandwidth per call comprises the bandwidth for a modem call.

6. The method of claim 1, wherein adjusting the first bandwidth for the ATM connection based

5    on the overbooking factor to determine a second bandwidth for the ATM connection comprises:

        dividing the first bandwidth for the ATM connection by the overbooking factor to

determine the second bandwidth for the ATM connection.

7. The method of claim 1, further comprising:

10        subtracting the second bandwidth from an available bandwidth on the link to get a new

available bandwidth on the link.

8. The method of claim 1, wherein the overbooking factor is based on at least one of silence

suppression, encoding, and voice compression.

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9. The method of claim 1, wherein the link comprises at least one of a DS-3 link, an OC-3 link,

an OC-12 link, and an OC-48 link.

10. The method of claim 1, wherein the communication device comprises another gateway

20    device.

11. A communication system for allocating an ATM connection over a link of an ATM network, the communication system comprising:

a gateway device connected to the ATM network and configured to determine a first bandwidth for the ATM connection based on a number of calls for the ATM connection and an

5     estimated bandwidth per call, wherein the estimated bandwidth per call corresponds to a maximum bandwidth required for a call, and transmit a request for the ATM connection that indicates the first bandwidth for the ATM connection; and

a communication device in the ATM network that is coupled to the gateway device by the link and configured to receive the request for the ATM connection, determine an

10    overbooking factor for the link, adjust the first bandwidth for the ATM connection based on the overbooking factor to determine a second bandwidth for the ATM connection, determine if the link has at least the second bandwidth available, and indicate that the ATM connection can be allocated for the second bandwidth if the link has at least the second bandwidth available.

15    12. The communication system of claim 11, wherein the communication device is configured to:

indicate that the ATM connection cannot be allocated for the second bandwidth if the link does not have at least the second bandwidth available.

13. The communication system of claim 11, wherein the estimated bandwidth per call comprises

20    a maximum bandwidth for a call.

14. The communication system of claim 11, wherein the estimated bandwidth per call comprises the bandwidth for a fax call.

15. The communication system of claim 11, wherein the estimated bandwidth per call comprises the bandwidth for a modem call.

5    16. The communication system of claim 11, wherein the communication device is configured to:

divide the first bandwidth for the ATM connection by the overbooking factor to

determine the second bandwidth for the ATM connection.

17. The communication system of claim 11, wherein the communication device is configured to:

10    subtract the second bandwidth from an available bandwidth on the link to get a new

available bandwidth on the link.

18. The communication system of claim 11, wherein the overbooking factor is based on at least

one of silence suppression, encoding, and voice compression.

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19. The communication system of claim 11, wherein the link comprises at least one of a DS-3

link, an OC-3 link, an OC-12 link, and an OC-48 link.

20. The communication system of claim 11, wherein the communication device comprises

20    another gateway device.